

# Watt Institution and School of Arts.

## ABRIDGED SYLLABUS OF THE COURSE OF LECTURES ON SANITATION.

In this Course of about Twenty Lectures it is intended to point out the principles which guide us in selecting or devising Sanitary arrangements and appliances, and executing work so as to promote health. The Course is addressed specially to architects and tradesmen engaged in practical work; and the chief sanitary inventions will be described in detail and criticised. Numerous experiments, drawings, and specimens are exhibited in illustration of the Lectures.

**WATER SUPPLY.**—Amount required—quality—prevention of contamination at source, in carrying, and in distribution—head and reservoirs—constant and intermittent supply—material and lining of pipes—action of subsoil on iron—of different waters on lead—position of pipes—conditions of intake of gases or liquids from surrounding soil—cisterns—overflows—valves—cocks—regulations of water companies—meters—detection of waste—hardness—filters and filtration.

**DWELLINGS.**—Site—aspect—dryness of site—isolation from soil—damp proof courses—walls—arrangement of rooms—drying new buildings.

**VENTILATION.**—Composition of air—impurities added—amount required for breathing—gas—fires—cubic space and ready methods for measuring—circulation of air—inlets—outlets—air shafts—ceiling—floors—valves, by different makers—tubes—whole house systems—ventilating cowls and fans—air cleaning.

**WARMING.**—Principles of good combustion and proper air warming—open fires and varieties of them—stoves for gas, for coal—ventilating stoves and fire-places—hot water, high and low pressure—steam—smoky chimneys.

**BATHS.**—Position—size—inlet—outlet—valves—hot water from kitchen—different patent and other systems.

**GAS.**—Arrangement of pipes—testing pipes—combustion—burners.

**REMOVAL OF WASTE.**—Slop sinks—kitchen sinks—material and position—contraction and expansion of metals—joints—traps and trapping.

Dry earth closets—charcoal closets—ash closets—tub systems, with numerous examples of each.

**WATERCLOSETS.**—Shape and size of basin—hopper closets—wash-out closets—trapless closets—valve closets—pan closets—ventilation and position of closets—amount and mode of water supply—water waste preventers and meter valves—closet mechanism.

**SOIL PIPES.**—Position—material—size—ventilation—rate of flow—disconnecting traps at junction of house pipes with branch sewer.

**HOUSE DRAINS.**—General arrangement of house pipes—systematic inspection of a house, and methods of testing.

**SEWERS.**—Material—shape—size—inclination—workmanship.

**DISINFECTION AND DISINFECTANTS.**

